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#### STATE OF NEW YORK PUBLIC SERVICE COMMISSION

Joint Complaint of AT&T
Communications of New York, Inc., MCI
Telecommunications Corporation,
WorldCom, Inc. d/b/a LDDS WorldCom
and the Empire Association of Long
Distance Telephone Companies, Inc.
Against New York Telephone Company
Concerning Wholesale Provisioning of
Local Exchange Service By New York
Telephone Company and Sections of
New York Telephone's Tariff No. 900

Case 95-C-0657

Proceeding on Motion of the
Commission to Examine Issues Related
to the Continuing Provision of Universal
Service and to Develop a Regulatory
Framework for the Transition to
Competition in the Local Exchange
Market

Case 94-C-0095

Proceeding on Motion of the Commission Regarding Comparably Efficient Interconnection Arrangements for Residential and Business Links

Case 91-C-1174

Complaint of AT&T Communications of New York, Inc. Against New York Telephone Company Concerning AT&T's Request for Four Collocated "Cages" To Be Provided By New York Telephone Pursuant to Its Optical Transport Interconnection Service II ("OTIS-II") Tariff

Case 96-C-0036

REBUTTAL TESTIMONY OF THE BELL ATLANTIC - NEW YORK PANEL ON COSTS AND RATES FOR PHYSICAL AND VIRTUAL COLLOCATION

\*\*\*\* REDACTED VERSION \*\*\*\*

#### Members of Panel:

Mr. Robert G. Grenier Ms. Karen Maguire Mr. Lawrence B. Rath

June 5, 1998

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1	ı.	INTRODUCTION
2	Q.	WHAT IS THE PURPOSE OF THE PANEL'S REBUTTAL TESTIMONY?
3	A.	The purpose of the Panel's testimony is to rebut the Responsive Testimony of
4		Mr. Rick Bissell (on behalf of AT&T and MCI) and the Responsive Testimony of
5		Mr. Donald C. Davis (on behalf of Intermedia), both filed on May 8, 1998.
6 7	II.	BA-NY'S COLLOCATION COST STUDIES ARE WELL DOCUMENTED AND FORWARD-LOOKING
8	Q.	DO YOU AGREE WITH MR. BISSELL'S STATEMENT THAT THE PANEL'S
9		TESTIMONY IS "EXTREMELY SUPERFICIAL AND CONTAINS LITTLE
10		SUPPORTING DOCUMENTATION" AND THAT BA-NY'S SUPPORTING
11		DOCUMENTATION FAILS TO INCLUDE SUPPORTING INVOICES? [P. 1]
12	A.	Absolutely not. BA-NY attached to its March 27, 1998 Panel Testimony
13		extremely detailed workpapers showing how each cost was calculated. In
14		addition, on April 23, 1998 BA-NY responded to a data request submitted by
15		AT&T, <sup>1</sup> which contained detailed information – including vendor and general
16		contractor invoices – utilized to develop the following costs:
17		<ul> <li>collocation cage-related costs;</li> </ul>
18		<ul> <li>complete power plant investment data utilized to develop the DC</li> </ul>
19		power per amp charge;
20		<ul> <li>cable and termination investments to support the costs associated</li> </ul>
21		with the service access charge (SAC); and

<sup>&</sup>lt;sup>1</sup> BA-NY Response to ATT-NYT-1217.

1	<ul> <li>all termination and cable investments associated with Virtual</li> </ul>
2	Collocation.
3	BA-NY has attached this proprietary data response as an Exhibit to this Rebuttal
4	Testimony.
5	In addition, BA-NY explained the derivation of the cable lengths for the SAC
6	charge (taken from a sample which included 80% of the actual physical
7	collocation arrangements in New York State) and the interconnection access
8	charge (taken from the entire universe of virtual arrangements in place at the
9	time the costs were analyzed). BA-NY further explained the labor hours for the
10	Telecom Industry Services ("TIS") and engineering work groups associated with
11	designing and implementing collocation projects.
12	BA-NY's cost studies therefore reflect actual New York-specific collocation costs
13	and utilize actual New York investments and labor rates. Mr. Bissell apparently
14	failed review this extensive data response before he filed his testimony on May 8
15	1998.
16	In stark contrast, Mr. Bissell's Model contains little or no New York related-costs,
17	but rather relies on a collection of costs and expenses acquired largely from
18	small unknown vendors located in other parts of the country (or outside the
19	country). Significantly, AT&T and MCI have admitted that they have never used
20	the Model to estimate costs for collocation on their premises.2

<sup>&</sup>lt;sup>2</sup> AT&T Response to NYT-ATT-436; MCI Response to NYT-MCI-116.

1	Q.	DO YOU AGREE WITH MR. BISSELL'S STATEMENT THAT IT IS
2		INAPPROPRIATE TO RELY UPON COSTS OF PREVIOUS COLLOCATION
3		PROJECTS TO GENERATE FORWARD-LOOKING COSTS FOR FUTURE
4		COLLOCATION PROJECTS? [P. 2; DAVIS P. 6]
5	A.	No. It is entirely appropriate to determine forward-looking costs by drawing on
6		BA-NY's actual experience provisioning collocation. The essence of Mr. Bissell's
7		statement is that the parties should never rely on actual contractor invoices to
8		determine material investments in a forward-looking cost study. Such a notion is
9		absurd. The only question to ask is whether the current collocation costs are
10		representative of forward-looking costs. BA-NY has determined that they are.
11		Indeed, Mr. Bissell has acknowledged that collocation generally is a nuts and
12		bolts technology. That is, this service generally is comprised of fencing, conduit,
13		electrical hardware, screws, nuts and bolts. These components will not be
14		susceptible to broad price swings in the near future. The same is true with
15		respect to the termination panels and connecting cable utilized in the
16		development of SAC and IAC costs.
17		Moreover, BA-NY has made several adjustments to its current costs to ensure
18		that its collocation cost studies are appropriately forward-looking. For example,
19		the labor hours associated with designing and implementing collocation projects
20		were reduced to reflect expected future efficiencies resulting from additional
21		experience with provisioning collocation. BA-NY also adjusted its current
22		utilization rates upward to reflect that these rates will increase over time, which
23		has the effect of reducing costs to the collocators.

1		rinally, as ba-in response to MCI-NY I-
2		58, its collocation costs are conservative because they are based on present day
3		labor rates, which likely will increase from year to year.
4	Q.	DOES BA-NY'S COST STUDY USE A FULLY-DISTRIBUTED COSTING
5		METHODOLOGY BASED ON PAST COSTS, NOT FORWARD-LOOKING
6		COSTS, AS MR. DAVIS CLAIMS? [P. 4]
7	A.	No. A fully distributed cost study would arbitrarily assign costs to specific
8		services or categories of services in order to fully allocate or fully distribute all of
9		a company's costs. BA-NY followed no such cost study design. To the contrary,
10		BA-NY produced a forward-looking cost study consistent with a TELRIC
11		methodology, as described above.
12	Q.	DO YOU AGREE WITH MR. DAVIS' STATEMENT THAT COSTS ASSOCIATED
13		WITH SIMPLY BEING A LARGE CORPORATION WITH NUMEROUS
14		EMPLOYEES "TYPICALLY FIND THEIR WAY INTO JOINT AND COMMON
15		COST ESTIMATES AND OTHER OVERHEAD LOADINGS"? [P. 6]
16	A.	No. Mr. Davis has provided no specifics regarding any section of BA-NY's cost
17		studies where the mere fact that BA-NY has a large number of employees has
18		increased any costs. In fact this allegation has no basis, and the Commission
19		should treat it as unwarranted and unsupported.
20		Moreover, the parties have already litigated and the Commission has determined
21		the appropriate joint and common factors to be used in this proceeding.3

<sup>&</sup>lt;sup>3</sup> See Case 95-C-0657, 94-C-0095, 91-C-1174, Opinion and Order No. 97-2, Attachment C.

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1		Intermedia could have raised these arguments in the prior phases of this case,
2		but he did not. These factors are addressed in more detail in the Direct and
3		Rebuttal Testimony (and supporting exhibits) of BA-NY's Panel on Miscellaneous
4		Phase 3 Services, filed on March 18, 1998 and June 3, 1998.
5 6 7	111.	THE COMMISSION HAS ALREADY RULED THAT BA-NY IS ENTITLED TO RECOVER ALL ROOM CONSTRUCTION COSTS, DETERMINED ON A CASE-BY-CASE BASIS
8	Q.	HAS THE COMMISSION ALREADY RULED ON THE APPROPRIATE
9		METHODOLOGY FOR RECOVERING ROOM CONSTRUCTION COSTS?
10	A.	Yes. On May 29, 1998, the Commission affirmed its earlier ruling that BA-NY is
11		entitled to recover all of the costs associated with constructing a collocation
12		room, holding that it was "neither reasonable nor equitable in the circumstance"
13		to require BA-NY to bear some or all of the room construction costs.4 The
14		Commission also ruled that room construction costs shall be determined on a
15		case-by-case basis, with each collocator paying its share of these costs based
16		on its assignable square footage of collocation space. <sup>5</sup> (All unrecovered room
17		construction costs will be recovered from all physical collocators in a geographic
18		area.)
19	Q.	DOES THE COMMISSION'S MAY 29, 1998 RULING MOOT MR. BISSELL'S
20		ARGUMENTS REGARDING ROOM CONSTRUCTION COSTS?

<sup>&</sup>lt;sup>4</sup> See Case 95-C-0657, 94-C-0095, 91-C-1174, 96-C-0036, Order Adopting the March 2, 1998 Order as a Permanent Rule and Denying Petitions for Rehearing, at 21 (May 29, 1998).

<sup>&</sup>lt;sup>5</sup> *Id.*; see also Order Directing Tariff Changes for Non-Price Terms and Conditions for Collocation at 10-12 (March 2, 1998).

1 A. Yes, Mr. Bissell's arguments regarding room construction costs – which are the 2 vast majority of his May 8 testimony - are now moot and should be disregarded. 3 Although Mr. Bissell makes numerous (repetitive) arguments, he essentially 4 makes only two points in his May 8 testimony: (1) that BA-NY should bear some 5 or all of the costs associated with room construction, including the costs of 6 providing secure access; and (2) that BA-NY should be forced to provide an 7 average room construction rate, rather than an individual case basis ("ICB") rate 8 structure. Both of these arguments have been rejected by the Commission. 9 HAS AT&T/MCI PROVIDED ANY EVIDENCE THAT BA-NY HAS Q. 10 MANIPULATED ROOM CONSTRUCTION CHARGES TO CREATE AN 11 ARTIFICIAL BARRIER TO ENTRY, AS MR. BISSELL CLAIMS? [P. 9] 12 A. No. AT&T/MCI have failed to provide any evidence that BA-NY has created 13 artificial barriers to entry by manipulating room construction costs. Nor could they. BA-NY uses its best judgment regarding the appropriate room construction 14 required to accommodate collocators. AT&T/MCI's unfounded attacks should be 15 16 disregarded.7 DO YOU AGREE WITH MR. BISSELL'S STATEMENT THAT "TO ESTABLISH A 17 Q. 18 SINGLE LARGE AND COSTLY COLLOCATION AREA REPRESENTS REGRESSIVE PLANNING PRACTICE"? [PP. 10-11] 19

<sup>&</sup>lt;sup>6</sup> See, e.g., Bissell Responsive Testimony at 7-11, 13-14, 23.

<sup>&</sup>lt;sup>7</sup> Despite Mr. Bissell's claims (p. 9), AT&T and MCI were unable to cite a single instance where BA-NY rejected space suitable for 4 collocators in favor of space suitable for more than 4. AT&T Response to NYT-ATT-399; MCI Response to NYT-MCI-97.

A. No. Mr. Bissell is again arguing in the abstract. First, each central office will require unique collocation build-outs, depending on the design of the central office and the expected future collocation demand. BA-NY considers various factors in determining how to design a collocation room and applies its years of judgment and expertise. BA-NY has asked the CLECs to provide forecasts so that it can determine demand and size collocation rooms accordingly. Most CLECs have not provided such forecasts, despite written requests to do so. Indeed, BA-NY asked AT&T and MCI to provide collocation forecasts in this proceeding, but they stated that none existed.8 AT&T cannot be allowed to have it both ways: withholding forecasting information then faulting BA-NY's good faith efforts to determine the appropriate amount of collocation space that that will be required in a particular central office. Absent CLEC forecasts, BA-NY must determine the appropriate collocation room size on its own, and has agreed to seek guidance from the Commission where appropriate. Second, Mr. Bissell's claim that it is more efficient to build-out multiple collocation areas is plainly wrong. It is generally more efficient to build one collocation room, sized to meet expected demand, than to build multiple rooms in the same central office. Indeed, building collocation rooms on a piecemeal basis denies collocators the economies of scale available when a single collocation room is constructed. If BA-NY built collocation areas on a piecemeal basis, it would have to construct separate cable racking, power and HVAC. The costs of doing so

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<sup>&</sup>lt;sup>8</sup> AT&T Responses to NYT-ATT-424, 425 and 426; MCI Responses to NYT-MCI-107, 108 and 109.

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1		would be prohibitive. The costs of installing one 20-ton HVAC system, for
2		example, is far lower than the costs of installing four 5-ton HVAC systems.
3		Similarly, cable racking provided to 4 different collocation rooms in a single
4		central office will be much more expensive on a per collocator basis than building
5		larger cable racking to a single collocation room in that central office.
6		Finally, Mr. Bissell's argument is irrelevant because the first collocator is not
7		responsible for the costs of building out a room to accommodate multiple`
8		collocators. Under the Commission's cost recovery proposal, collocators are
9		required to pay only their portion of the room construction costs associated with
10		their square footage of collocation space. After a period of time, if BA-NY has
11		not recovered all of the room construction costs, the unrecovered costs are
12		allocated among all CLECs in a particular geographic region.
13	Q.	IS MR. BISSELL CORRECT THAT 550 SQUARE FEET IS "A GOOD BASIC
14		ASSUMPTION" FOR ESTIMATING INVESTMENTS ASSOCIATED WITH
15		COLLOCATION? [P. 10]
16	A.	No. As noted above, the size of the collocation area depends on the
17		configuration of the particular office as well as expected demand. 550 square
18		feet may be a good estimate in one central office, but may significantly
19		understate requirements in other central offices. In fact, 550 square feet would
20		have been the wrong amount of floor space to prepare at the Company's 140
21		West Street collocation room, which contains 8500 square feet of collocation
22		space. Indeed, collocators generally are requesting very large collocation cages.
23		CLEC demand forecasts would certainly assist BA-NY in deciding the proper

1		amount of floor space to prepare for collocation. In the absence of these
2		forecasts, BA-NY must rely on its judgment and expertise.
3 4 5	IV.	THE AT&T/MCI COLLOCATION MODEL SHOULD BE REJECTED BECAUSE IT RELIES ON OUTDATED CENTRAL OFFICE BUILDING DATA AND FLAWED ASSUMPTIONS
6	Q.	HAS THE FUNDAMENTAL PREMISE OF THE MODEL BEEN REJECTED BY
7		THE COMMISSION?
8	A.	Yes. The Commission's ruling on room construction costs rejects the
9		fundamental premise of the Model that BA-NY should bear the costs of
10		retrofitting its central office to accommodate collocators, including the costs of
11		providing secure access. The Model should therefore be discarded on this basis
12		alone.
13	Q.	MR. BISSELL REPEATS HIS CLAIM THAT THE MODEL "INCORPORATES
14		THE INVESTMENT ASSOCIATED WITH A COMPLETE NEW STATE-OF-THE-
15		ART TELECOMMUNICATIONS BUILDING, WHICH INCLUDES A MODERN
16		CARD SECURITY SYSTEM." [P. 6] IS THIS TRUE?
17	A.	No. The AT&T/MCI Collocation Model includes a flawed assumption that the
18		costs of a new state-of-the-art secure identification system is already included in
19		its per-square- foot charges, which are based on R.S. Means Building
20		Construction data. As BA-NY explained in detail in its Responsive Testimony,
21		the R.S. Means data relied on by the Model is outdated and contains the
22		construction costs of only one central office built within the last ten years (most of

1		the Means central offices were constructed over 15-20 years ago).9 Even if this
2		building were constructed with a secure identification reader system - which is
3		unlikely given that such systems were not widely deployed ten years ago - these
4		costs would be diluted and thus not accurately reflected in the database
5		containing 64 other buildings.
6		AT&T/MCI's baseless assumption that these costs are included in the R.S.
7		Means Building costs must be rejected.
8	Q.	PLEASE RESPOND TO MR. BISSELL'S STATEMENT THAT COLLOCATORS
9		SHOULD BE PROVIDED WITH SECURE IDENTIFICATION READER CARDS
10		AND THAT A SYSTEM SHOULD BE INITIATED FOR UPDATING THE LIST OF
11		CENTRAL OFFICES WITHOUT ELECTRONIC ACCESS CARD SECURITY
12		SYSTEMS. [P. 7]
13	A.	Mr. Bissell's point is obscure. BA-NY will only charge collocators for constructing
14		security measures necessary to secure the collocation area, which is included as
15		part of the room construction charges. If the central office already has a secure
16		access reader, then the collocators will not be charged for the costs associated
17		with this card reader system.
18		It is important to note that even if the central office has an existing security
19		identification reader system in place, additional security measures may be
20		required to secure the areas inside the central office to which collocators will

<sup>&</sup>lt;sup>9</sup> BA-NY stated in its Responsive Testimony that the most recent building included in the R.S. Means Building Costs was constructed in 1985. BA-NY has since learned from R.S. Means that the most recent building included in the data was constructed in 1989, and that two were constructed in 1986. BA-NY corrected this information in a data response provided to AT&T/MCI on June 2, 1998.

1		have access. For example, BA-NY may need to install additional motherboards,
2		coded locks, partitioning or entranceways. The collocators should bear the
3		costs of these additional security measures, determined on an ICB basis.
4		BA-NY's cost recovery approach – including its method of recovering security
5		costs - therefore is conservative. The collocators will not have to bear any of the
6		costs associated with the security systems in place before the collocation room is
7		built, only those necessary to build out the existing central office to accommodate
8		collocators.
9	V.	BA-NY'S POWER COSTS ARE REASONABLE
10	Q.	MR. BISSELL SUGGESTS THAT BA-NY'S -48 VOLT POWER COSTS ARE
11		HIGHER THAN THE POWER COSTS CONTAINED IN OTHER UNIDENTIFIED
12		ILECS' COST STUDIES. [P. 2] WHAT IS YOUR RESPONSE?
13	A.	Mr. Bissell's statement is inappropriate and should be stricken from the record.
14		BA-NY's power costs are to be compared with those developed by other ILECs,
15		then BA-NY has the right to know the identity of the other ILECs and how these
16		costs were calculated (e.g., marginal cost, incremental cost). Most important,
17		BA-NY has the right to analyze the components included in the other ILEC
18		studies to ensure that Mr. Bissell is comparing apples-to-apples.
19		BA-NY has asked Mr. Bissell for copies of the other ILEC studies he alleges
20		show lower power costs than those included in BA-NY's study, and to explain the
21		steps he took to ensure that he was comparing apples-to-apples. He refused to

1		provide these studies on the ground that they were proprietary. 10 (Mr. Bissell
2		cited the Bell Atlantic-Massachusetts power study, which contains power costs
3		that actually are slightly higher than BA-NY's power costs.) Mr. Bissell also failed
4		to explain the steps he took to make sure he was comparing identical cost
5		components despite BA-NY's request.
6		Accordingly, for these reasons and for the additional reasons set forth in BA-NY's
7		Rebuttal Testimony on Miscellaneous Phase 3 Services filed on June 3, 1998
8		(addressing AT&T/MCI's assertion that the Texas Commission has adopted
9		lower switching investments), AT&T/MCI's unfair and unsupported allegations
10		regarding other ILEC power costs should be disregarded.
11		The only issue relevant to this proceeding is whether BA-NY's power costs reflect
12		New York-specific costs and are calculated consistent with the TELRIC
13		methodology. BA-NY has demonstrated that they are. These costs represent
14		the range of power investments necessary to construct a complete power plant
15		and are developed on a per-amp basis utilizing the actual investments for real
16		power plant components in New York.
17	Q.	MR. BISSELL CLAIM'S THAT INCLUDING A POWER PLANT EXPANSION
18		CHARGE IN THE COMMON AREA ROOM CONSTRUCTION CHARGE IN
19		CONJUNCTION WITH A MONTHLY POWER CHARGE PERMITS DOUBLE
20		RECOVERY OF POWER COSTS. [PP. 3, 14] IS THIS TRUE?

<sup>&</sup>lt;sup>10</sup> AT&T Response to NYT-ATT-499; MCI Response to NYT-MCI-178.

1	Α.	No. Mr. Bissell is confused. A collocator will not be charged both an ICB power
2		construction cost and a monthly recurring power charge. Typically, a CLEC will
3		be assessed the monthly cost of DC power expressed on a per-amp basis. If,
4		however, BA-NY is required to take the unusual step of building a new power
5		plant dedicated to collocators, the CLEC would be assessed only the cost of that
6		power plant and would not be required to pay the recurring DC power per-amp
7		charge.
8	Q.	DO YOU AGREE WITH MR. BISSELL'S ASSERTION THAT THE "MONTHLY
9		RECURRING CHARGE FOR -48 VOLT DC AND AC POWER CONSUMPTION
10		IS EXCESSIVE"? [P. 3]
11	A.	No. As stated above, the power plant costs included in the BA-NY collocation
12		cost study are comprised of actual investments in power equipment that BA-NY
13		purchases, and are supported by vendor invoices. The installation factor applied
14		to these investments is based on one year's worth of material investments and
15		the necessary capital dollars to put that investment in place for use in New York.
16		Other unconfirmed ILEC cost studies ostensibly examined by Mr. Bissell or the
17		unsubstantiated "low-ball" costs included in the AT&T/MCI Collocation Model are
18		inappropriate for comparison to BA-NY's costs because they are purely
19		hypothetical.
20	Q.	DO YOU AGREE WITH MR. BISSELL'S CLAIM THAT THE MODEL'S PRICING
21		OF -48 VOLT DC POWER IN TERMS OF AMPS DELIVERED PAYS A
22		PREMIUM TO BA-NY FOR POWER COSTS? [P. 16]

1	A.	No. Mr. Bissell argues that because most telecommunications equipment
2		manufacturers recommend that their equipment be fused at about 30% higher
3		than the expected capacity, the AT&T/MCI Collocation Model purportedly
4		provides a corresponding 30% premium benefit to BA-NY given that the Model
5		prices power delivery in terms of amps delivered. What Mr. Bissell is referring to,
6		however, is the routine and common sense practice of providing additional
7		amperage above that necessary to support power consumption. This is standard
8		practice in the telecommunications industry. In fact, the National Electric Code
9		requires electrical circuits to be fused at a level higher than the power consumed
10		by the equipment.
11		For example, the proper amperage for toll equipment requiring 15 amps of power
12		is 20 amps. This is required so that a momentary spike in current drain will not
13		"blow" the fuse and disable the toll equipment. The collocator should bear all of
14		the costs of providing this additional amperage. Mr. Bissell's failure to recognize
15		these facts demonstrates his apparent lack of power engineering experience.
16	Q.	IS MR. BISSELL CORRECT THAT BA-NY'S POWER INSTALLATION FACTOR
17		IS EXCESSIVE BECAUSE IT "OBVIOUSLY" OVERINCLUDES INTERNAL
18		MANPOWER CHARGES AND INCLUDES INSTALLATIONS REQUIRED FOR
19		CONVERTING ANALOG TO DIGITAL SWITCH REPLACEMENTS? [PP. 16-17]
20	A.	No. Mr. Bissell misunderstands the concept of installation factors. Installation
21		factors provide a reasonable method of recovering installation costs, as the
22		Commission recognized in adopting several installation factors in previous
23		phases of this case. BA-NY's power installation factor was developed by dividing

1 actual material investments in power equipment purchased for central offices in 2 the State of New York for calendar year 1995 into that same material investment 3 plus all of the capitalized labor and expenses associated with placing that power 4 equipment into service.11 The only thing that is "obvious" about the power 5 installation factor is that it is New York specific, in contrast to the non-New York-6 specific power and installation costs included in the AT&T/MCI Collocation 7 Model. 8 Further, despite Mr. Bissell's claims to the contrary, it is entirely appropriate to 9 include analog to digital switch conversions in the power installation factor. This 10 factor includes all power installations, including power augments, brand new 11 power plants, and analog conversions. In fact, BA-NY's power installation factor 12 is conservative because it includes the less expensive power augments even 13 though under a TELRIC construct, BA-NY is determining the forward-looking 14 costs of a more expensive new power plant. 15 MR. BISSELL CLAIMS THAT ITEMS SUCH AS CABLE RACKING REQUIRED Q. 16 FOR DIGITAL SWITCHES ARE INAPPROPRIATELY INCLUDED IN THE 17 POWER INSTALLATION FACTOR. [P. 17] WHAT IS YOUR RESPONSE? 18 A. These items are indeed included in a power plant installation factor, as they 19 should be. Cable racking, for example, is required to support the power cables, which are part of all power plants, not just power distribution required for digital

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<sup>&</sup>lt;sup>11</sup> The back-up for BA-NY's power installation factor was provided in response to MCI-NYT-68.

switches. (Significantly, AT&T also includes cable racking in its own power plant installations, see below).

Q. SHOULD THE COMMISSION ADOPT THE AT&T/MCI MODEL'S POWER
 RATES, AS SUGGESTED BY MR. BISSELL? [P. 18]

No. As discussed above and in BA-NY's Responsive Testimony, the Model's power rates are grossly understated and should be rejected. AT&T/MCI have failed to include several supportable costs for power components such as the microprocessor, power distribution service cabinet, power distribution board, automatic breakers, and the emergency stand-by generator. The investments in the most significant power components – the stand-by generator and the automatic breakers - are actually the result of a mathematical calculation based on faulty assumptions rather than actual invoice data. In fact, no power investments included in the AT&T/MCI Model are supported by any credible invoices. Indeed, when asked for the amperage capacity of the switchboard breaker equipment included in the AT&T/MCI Model, AT&T/MCI responded by stating that "the quote did not identify the capacity of the switchboard breaker equipment but it is sufficient to accommodate a 400,000 watt generator."12 Essentially, AT&T/MCI are arguing that they do not know the answer, but it must be big enough. Such an answer casts doubt on the credibility of their power data and Mr. Bissell's ability to analyze power costs.

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<sup>&</sup>lt;sup>12</sup> AT&T Response to NYT-ATT-470.

1		By contrast, BA-NY's power costs are well documented and represent the actual
2		costs that BA-NY will incur to provide power to collocators.
3	Q.	HAVE YOU COMPARED BA-NY'S POWER INVESTMENTS WITH THOSE OF
4		AT&T?
5	A.	Yes. AT&T provided power investment data in response to a BA-NY
6		interrogatory <sup>13</sup> requesting "all invoices or other such documentation associated
7		with the most recent installation of an entirely new power plant, including all
8		supporting steel work, in AT&T's New York central offices." MCI has not yet
9		responded to BA-NY's request, which was submitted on April 24, 1998. BA-NY
10		will provide additional analysis once MCI provides the requested information.
1,1	Q.	HOW DID AT&T'S POWER COSTS COMPARE TO BA-NY'S AND THE POWER
12		COSTS INCLUDED IN THE AT&T/MCI COLLOCATION MODEL?
13	A.	[BEGIN AT&T PROPRIETARY]
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<sup>&</sup>lt;sup>13</sup> AT&T Response to NYT-ATT-482.

<sup>&</sup>lt;sup>14</sup> For 310 batteries.

<sup>&</sup>lt;sup>15</sup> Total material price divided by 2.

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6 [END AT&T PROPRIETARY] 16

7 Q. HOW DID YOU COMPARE AT&T'S INSTALLED INVESTMENT WITH BA-NY'S

8 COSTS?

In order to make an apples-to-apples comparison of installation costs, BA-NY excluded the investment associated with cable racking, lighting, and support hardware <sup>17</sup> of \$60,032, and the investment associated with the power cable and miscellaneous hardware of \$115,401<sup>18</sup> from the total material price of \$509,469. This leaves a total new investment of \$334,036 (rounded). Dividing this amount into the above-mentioned cost of the project of \$878,532, yields an installation factor of 2.630, which is close to the installation factor of 2.745 utilized in the BA-NY cost study. As stated before, AT&T's power project does not include the installation of the automatic breakers or emergency stand-by generator, the latter of which is probably the most significant piece of power plant hardware and very expensive to install.

<sup>&</sup>lt;sup>16</sup> The source of this data is page 1 of the "Order and Items Report" attached to NYT-ATT-482.

<sup>&</sup>lt;sup>17</sup> See id., 005 spec, at 16, total material price.

<sup>&</sup>lt;sup>18</sup> See id., the 064 spec, page 73, total material price.

1	Q.	WHAT DO YOU CONCLUDE BY EXAMINING AT&T'S POWER PLANT
2		INVESTMENTS?
3	A.	Based on the example provided by AT&T, AT&T's power plant investments and
4		installation costs are not significantly different – and in many cases are higher –
5		than the power costs contained in BA-NY's collocation cost studies.
6	Q.	YOU STATE THAT AT&T DID NOT PROVIDE BA-NY MATERIAL
7		INVESTMENTS FOR THE STAND-BY GENERATOR. DID YOU REQUEST
8		THOSE INVESTMENT AND INSTALLATION COSTS?
9	A.	Yes. BA-NY requested all invoices associated with the most recent installation of
10		an entirely new power plant, and thus expected the costs of a stand-by generator
l 1		to be included in AT&T's response. A supplemental request has been sent to
12		AT&T requesting invoices for the installed cost of a emergency stand-by
13		generator of 450 kilowatts or larger.
14	Q.	PLEASE EXPLAIN HOW AT&T'S INSTALLED POWER PLANT COSTS
15		COMPARE WITH THE POWER COSTS IN THE AT&T/MCI COST MODEL.
16	A.	AT&T's actual power plant installed investments are significantly higher than the
17		costs included in the AT&T/MCI Model. According to Mr. Bissell, he can
18		(hypothetically) provide a completely installed 2500 amp power plant for
19		\$364,788.92 and a completely installed 4000 amp power plant for \$635,428.92.
20		(Mr. Bissell also claims that his power plant includes the stand-by generator,
21		automatic breakers, entrance cable, and a fuel tank. Despite repeated requests,
22		Mr. Bissell has never provided a breakdown of the investment and installed cost

1		associated with the latter three items," and steadfastly states that his estimate is
2		"all inclusive.") <sup>20</sup>
3		For the installation of an actual "partial" power plant, AT&T's total installed
4		investment is \$878,532, which is 38% higher than Mr. Bissell's 4000 amp plant
5		and more than twice than amount of the 2500 amp plant.
6	Q.	DOES AT&T INSTALL THE SAME TYPE OF BATTERIES INCLUDED IN THE
7		AT&T/MCI COST MODEL?
8	A.	No. In its most recent power project, AT&T installed lead acid batteries similar to
9		those used by BA-NY, not the Absolyte batteries AT&T/MCI suggest in their own
10		cost model. In fact, AT&T admitted that "its primary source of DC back-up power
11		for all central offices (sic) buildings is lead acid" batteries.21 The cheaper
12		Absolyte batteries used in the AT&T/MCI Model are inferior – a fact borne out by
13		AT&T's own practices. The Model's use of these inferior batteries raises
14		significant doubt regarding the ability of the Model's developers to determine
15		appropriate power costs.
16	Q.	WHY IS THERE SUCH A SIGNIFICANT DIFFERENCE IN THE INSTALLED
17		INVESTMENTS INCLUDED IN THE COST MODEL COMPARED TO AT&T'S
18		ACTUAL POWER COSTS?
19	A.	Apparently, despite the assertions in its own cost model, AT&T cannot obtain
20		power plant equipment that is any less expensive than BA-NY. The power costs

<sup>&</sup>lt;sup>19</sup> AT&T Response to NYT-ATT-469; MCI Response to NYT-MCI-149.

<sup>&</sup>lt;sup>20</sup> See, e.g., AT&T Responses to NYT-ATT-470, 471, 476 and 480.

1		contained in the AT&T/MCI Collocation Model appear to have only one purpose -
2		to "low-ball" the costs associated with DC power. As demonstrated by AT&T's
3		own power costs, the Model's costs are not representative of an actual power
4		plant or the associated investments that would be placed in service by a
5		telecommunications carrier in New York. Perhaps the Model's developers should
6		have asked to examine AT&T's actual New York power costs before filing the
7		Model, instead of relying on the same non-New York power information
8		submitted elsewhere in the country.
9		[END AT&T PROPRIETARY]
10 11	VI.	BA-NY'S SAC AND IAC CHARGES ARE BASED ON FORWARD-LOOKING ASSUMPTIONS AND ARE REASONABLE
12		A. Cable Lengths
13	Q.	SHOULD CABLE LENGTHS BE ARBITRARILY REDUCED TO 165 FEET SO
14		THAT BA-NY WILL HAVE NO INCENTIVE TO MANIPULATE COSTS AS MR.
15		BISSELL CLAIMS? [PP. 4, 27-28]
16	A.	No. There is no evidence that BA-NY has manipulated costs. Indeed, in
17		response to a data request, AT&T/MCI could not identify any instance where BA-
18		NY unreasonably increased cable lengths just to increase costs to collocators. <sup>22</sup>
19		Mr. Bissell's unfounded suspicions do not create a basis for arbitrarily reducing
20		cable lengths.
21		When planning collocation sites, BA-NY considers many factors such as:

<sup>&</sup>lt;sup>21</sup> See AT&T Response to NYT-ATT-474.

<sup>&</sup>lt;sup>22</sup> AT&T Response to NYT-ATT-487; MCI Response to NYT-MCI-167.

1		<ul> <li>the ability to secure the collocation site;</li> </ul>
2		<ul> <li>proximity to the cable vault;</li> </ul>
3		<ul> <li>proximity to the main distributing frame and digital cross-connect</li> </ul>
4		frame locations;
5		<ul> <li>proximity to the power plant location;</li> </ul>
6		a reasonable estimate of the demand for collocation by CLECs in a
7		particular wire center; and
8		BA-NY's own future needs for space to accommodate its own
9		incremental need for floor space.
10		This type of planning is by no means regressive despite how it appears to
11		Mr. Bissell. (p. 25) To the contrary, it is progressive planning based on good
12		faith and BA-NY's judgment. In a fantasy environment, such as the one created
13		by Mr. Bissell, these real world issues do not exist.
14		Mr. Bissell also claims that BA-NY relies too heavily on excessive and costly
15		security measures in siting physical collocation nodes resulting in excessive
16		recurring SAC charges. (pp. 4-5) Mr. Bissell argument is purely speculative.
17		Depending on the central office layout, the costs savings associated with
18		reducing cables lengths – lower SAC rates – may be far outweighed by the
19		increased security costs or additional HVAC equipment installation needed as a
20		result.
21	Q.	DO THE SHORTER CABLE LENGTHS INCLUDED IN THE VIRTUAL
22		COLLOCATION COST STUDY DEMONSTRATE THAT THE CABLE LENGTHS

1		IN THE PHYSICAL COLLOCATION STUDY ARE TOO LONG, AS SUGGESTED
2		BY MR. BISSELL? [PP. 4-5]
3	A.	No. Mr. Bissell completely misses the point. BA-NY is able to place the virtual
4		equipment and its own equipment closer to its frames because there is no need
5		to build a separate and secure collocation room in a virtual collocation
6		environment.
7		In fact, Mr. Bissell's statement that BA-NY's virtual collocation lengths are shorter
8		actually supports the notion that BA-NY applies "best practice planning" by
9		making use of the best available space to provision collocation whether it is a
10		physical or a virtual arrangement. If BA-NY truly were trying to manipulate costs,
11		it would artificially increase both virtual and physical cable lengths. The virtual
12		collocation cable lengths contained in BA-NY's cost study, however, are up to 1/3
13		shorter than the lengths proposed by Mr. Bissell here.
14	Q.	DID BA-NY RELY ONLY ON LARGE URBAN CENTRAL OFFICES IN
15		DETERMINING ITS CABLE LENGTHS, AS SUGGESTED BY MR. BISSELL?
16		[BISSELL PP. 25-27]
17	A.	No. The cable lengths utilized in BA-NY's SAC and IAC cost studies are based
18		on samples of actual cable lengths for SAC and IAC cables in existing collocation
19		arrangements. These arrangements are located in a mix of large and small
20		buildings, from the 140 West Street central office (42 floors, including sub-
21		basement and tower space) to the Harrison central office (1 floor). <sup>23</sup> This current

 $<sup>^{23}</sup>$  BA-NY provided this information to AT&T/MCI in response to AT&T-NYT-915 and AT&T-NYT-1217 (attachments 3 and 4).

1 mix of central office sizes is representative of the mix of central offices in which 2 collocation will be provisioned in the future.

#### B. Installation Factors

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- Q. DO INSTALLATION FACTORS "ARTIFICIALLY" RAISE MANY COLLOCATION
   INVESTMENT COSTS, AS MR. BISSELL CLAIMS? [P. 3]
  - A. No. BA-NY's installation factors appropriately reflect installation costs. Like the power installation factor discussed above, BA-NY applies an installation factor to the material investments (based on vendor invoices) for the cabling and terminations to determine the appropriate SAC and IAC charges. BA-NY installation factors are based on New York-specific material investments and all of the capital dollars necessary to put those material investments in use. More specifically, the installation factor for digital circuit equipment is based upon one year's worth of total material investment (for this plant account) divided into the total material investment plus all of the capitalized labor and expenses, including items such as transportation charges, cable racking necessary to put that material investment in-place for service. Back-up for the digital circuit installation factor was provided in BA-NY's response to ATT-NYT-1217. Significantly, Mr. Bissell fails to point out any flaws in BA-NY's calculation of its installation factors, arguing only that BA-NY's factor is 25 percent too high based on third-party quotes he obtained. (p. 33) This Commission, however, has approved BA-NY's use of installation factors in previous phases of this proceeding. Moreover, the very nature of an installation factor means that for some installations, BA-NY may over-recover costs; for other installations, BA-NY

1		may under-recover costs. Across all installations, however, BA-NY will recover
2		only its actual costs. Installation factors may not be applied selectively to
3		particular components. Thus, even if Mr. Bissell's quotes were credible (which
4		they are not), they may not be used to determine installation costs.
5		Mr. Bissell's general complaints about BA-NY's SAC and IAC installation factors
6		should therefore be rejected.
7		C. Utilization Factors
8	Q.	ARE THE SAC AND IAC UTILIZATION FACTORS TOO LOW, AS MR. BISSELL
9		ASSERTS? [PP. 3, 34]
10	A.	No. The facts speak for themselves. The utilization factors used in BA-NY's cost
11		study are actually higher than the actual SAC and IAC utilizations in BA-NY's
12		network today. In response to ATT-NYT-1217 (attachments 3 and 4), BA-NY
13		provided a back-up material containing actual utilization figures. As BA-NY
14		explained in its Direct and Responsive Testimony, the collocation cost studies
15		use the utilization factors for the various services from arrangements that are
16		over two years old. This assumption accounts for the fact that some collocators
17		need to grow into their arrangements, and reflects the fact that utilization rates
18		increase and decrease over time (see below). If BA-NY had used the current
19		utilization rates, the costs would have been higher.
20		Finally, utilization rates are determined by the collocators, not BA-NY. BA-NY
21		may experience higher utilization rates only if the CLECs are willing to change
22		their equipment ordering habits. That is, because BA-NY charges only for cables
23		and terminations actually utilized, collocators are finding it easier (and cheaper)

1 to order more termination equipment and cabling from BA-NY rather than re-wire 2 the equipment in their cage to existing unused termination panels located in their 3 POT Bay. If the collocators used existing cables and terminations, the utilization 4 rates would be higher. But until BA-NY experiences a change in this pattern, it 5 must be assumed that the two-year utilization rates are reasonably 6 representative of forward-looking costs. It would be grossly unfair to require BA-7 NY to adopt higher utilization rates, but permit collocators to continue to order 8 cables and terminations regardless of whether they have reached capacity. 9 Q. WHAT IS YOUR RESPONSE TO MR. BISSELL'S STATEMENT THAT SOME 10 TELECOMMUNICATIONS COMPONENTS MAY REACH A UTILIZATION OF 90 11 PERCENT. AND THAT "A GOOD LONG TERM UTILIZATION TARGET FOR 12 INSIDE COMPONENTS IS BETWEEN 80% AND 85%"? [P. 34] 13 BA-NY considers 85% utilization a reasonable trigger level at which to add Α. 14 capacity to a specific plant equipment item. Depending on the size of the 15 capacity addition, utilizations may drop to a very low level after the facility 16 reaches the trigger point and is relieved. As the Commission has recognized, the average utilization rate therefore will be lower than the trigger level.<sup>24</sup> 17 18 The most appropriate method of determining average utilization levels is to take 19 a snap-shot of the plant in question, as BA-NY did in its cost studies. That way, 20 BA-NY is capturing utilizations levels just before and immediately following 21 capacity additions, as well as the broad range of utilizations in between.

<sup>&</sup>lt;sup>24</sup> See Staff Memorandum dated March 8 1995, at 27-28 (Case 89-C-198); see also BA-NY's Responsive Testimony, at 60-61.

1		Mr. Bissell's proposed average utilization of 85% – which would imply a much
2		higher trigger point for relief – should be rejected as unrealistic.
3 4 5	VII.	BA-NY'S LABOR TIMES ASSOCIATED WITH DESIGNING AND IMPLEMENTING COLLOCATION ARRANGEMENTS ARE FULLY SUPPORTED AND APPROPRIATE
6	Q.	DO YOU AGREE WITH MR. BISSELL'S ASSERTION THAT BA-NY'S
7		MANPOWER ESTIMATES ARE EXCESSIVE AND NOT REPRESENTATIVE OF
8		A FORWARD-LOOKING ENVIRONMENT? [P. 2]
9	A.	No. BA-NY's manpower estimates are based on BA-NY's actual experience
10		provisioning more than 100 collocation arrangements in New York State, and are
11		representative of the amount of manpower required to provision a collocation
12		site. BA-NY witnesses Ms. Karen Maguire and Mr. Lawrence Rath both have
13		had considerable personal experience implementing collocation for CLECs and
14		have determined that the labor hours contained in BA-NY's collocation cost
15		studies are reasonable and representative of forward-looking costs.
16		The labor estimates contained in AT&T/MCl's Collocation Model, by contrast, are
17		based on the judgment of Mr. Bissell and Model experts, who have no
18		experience implementing collocation from BA-NY's perspective.
19	Q.	ARE BA-NY'S LABOR COSTS CONSERVATIVE?
20	A.	Yes. BA-NY's labor costs are conservative for several reasons. First, the labor
21		times reflect future efficiencies resulting from increased collocation experience.
22		Given that the collocator's actions drive much of the time required to implement
23		collocation projects, these efficiencies may never be realized. Second, the labor
24		rates are conservative because the Telecom Industry Group ("TIS") managers